STREPTOMYCES GRISEUS

SKRIPSI

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PERBANDINGAN PERTUMBUHAN *Streptomyces griseus* ATCC 10137 PADA MEDIA AMPAS TAHU BENTUK SERBUK DAN EKSTRAK

FAKULTAS FARMASI
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Lembar Pengesahan

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ABSTRACT

The aim of this research was to find out the optimum concentration of the extract of tofu refuse needed for the growth of *Streptomyces griseus* ATCC 10137, in media which contain 0,5%, 1% and 2% the extract of tofu refuse. The optimum medium obtained from this optimation was then being tested again to find the optimum pH for the growth of *Streptomyces griseus* ATCC 10137 among various pH 7,0; pH 7,3 and pH 7,5. The result of this optimation was then compared to the growth medium containing the powder of tofu refuse. One Öse of *Streptomyces griseus* ATCC 10137 culture from PDA medium was inoculated into 250 mL of the seed medium, ISP medium No. 4, and incubated at room temperature for 2-4 days on rotary shaker at 200 rpm. Three mL of this seed culture was transferred into 30 mL the growth medium containing tofu refuse. Ten mL of sample was taken from the 30 mL seed culture at every 12 hours. This sample was filtered by filtering paper whatman No 4.1, then dried in oven at 105^{0}C until constant Dry-cell Weight was obtained. This study showed that medium with 2% the extract of tofu refuse gave the highest Dry-cell Weight, followed by 1% and 0,5% concentration. The pH gave highest Dry-cell Weight was pH = 7. Based on the curve obtained from this research the optimum medium for the growth of *Streptomyces griseus* ATCC 10137 was the medium contains 2% the extract of tofu refuse and pH 7,0. The other research found that the optimum medium for the growth of *Streptomyces griseus* ATCC 10137 was the medium contains 0,5% the powder of tofu refuse and pH 7,3. There was no significant difference between both optimum media mentioned above.

Keyword : Tofu refuse, The extract of tofu refuse, Dry-cell Weigth, The growth of *Streptomyces griseus* ATCC 10137